

WHAT IS CLAIMED IS:

1. A method of assisting in the diagnosis of cardiomyopathy, myocarditis, or both,
5 that arises as a result of an infection in a patient, comprising, obtaining a sample of a
body fluid from the patient, and determining a level of a brain natriuretic peptide (BNP)
or a fragment thereof, atrial natriuretic peptide (ANF) or a fragment thereof, or both
BNP and a fragment thereof and ANF or a fragment thereof, within the sample of body
fluid and comparing the level of BNP, ANF or both BNP and ANF to the level of
10 BNP, ANF, or both BNP and ANF from a control group, where an increase in the
level of BNP, ANF, or both BNP and ANF in the sample, compared to the level of
BNP, ANF, or both BNP and ANF in the control group, is an indicator of a symptom
of cardiomyopathy, myocarditis or both cardiomyopathy and myocarditis that arises as a
result of an infection in a patient.
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2. The method of claim 1 wherein the step of determining the concentration of
BNP, ANF or both BNP and ANF involves an assay comprising one or more than one
antibody exhibiting affinity for the BNP or a fragment thereof, one or more than one
antibody exhibiting affinity for the ANF or a fragment thereof, or one or more than one
20 antibody exhibiting affinity for both the BNP or a fragment thereof and the ANF or a
fragment thereof.
3. The method of claim 1 wherein the body fluid comprises plasma.
- 25 4. The method of claim 1 wherein the body fluid comprises urine.
5. The method of claim 1 wherein the body fluid comprises cerebrospinal fluid.
6. The method of claim 1 wherein the infection comprises a viral infection, a
30 rickettsial infection, a bacterial infection, a mycobacterial infection, a spirochetal
infection, a fungal infection or a parasitic infection.
7. The method of claim 6 wherein the parasitic infection comprises *Trypanosoma*
cruzi.
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8. The method of claim 2 wherein the at least one antibody comprises a polyclonal antibody, a monoclonal antibody, or a combination thereof.

9. The method of claim 8 wherein the at least one antibody comprises a polyclonal antibody.

10. The method of claim 8 wherein the at least one antibody comprises a monoclonal antibody.

11. The method of claim 2 wherein, in the step of obtaining a sample of a body fluid from the patient, two or more than two samples of body fluid from the patient are obtained over a period of time.

12. The method of claim 11 wherein, in the step of determining the level of BNP or fragment thereof, ANF or a fragment thereof, or BNP and a fragment thereof and ANF or a fragment thereof, the level of BNP, ANF or both BNP and ANF is determined within each of the two or more than two samples of body fluid, and the level of BNP, ANF or both BNP and ANF compared to determine a change in the BNP, ANF or both BNP and ANF levels within the body fluid.

13. The method of claim 11, wherein a significant increase in the level of BNP, ANF or both BNP and ANF is a predictor of cardiomyopathy or myocarditis.

14. The method of claim 2 wherein the BNP is selected from the group consisting of mature BNP, a fragment of mature BNP, ProBNP, a fragment of ProBNP, and a combination of mature BNP, a fragment of mature BNP, ProBNP a fragment of ProBNP.

15. The method of claim 14 wherein the ProBNP is selected from the group consisting of BNP₁₋₇₆, BNP₁₋₂₅, BNP₅₂₋₇₆, and BNP₁₋₁₀₈.

16. The method of claim 14 wherein the mature BNP comprises BNP₇₇₋₁₀₈.

17. The method of claim 2 wherein the ANF is selected from the group consisting of mature ANF, a fragment of mature ANF, ProANF, a fragment of ProANF, and a

combination of mature ANF, a fragment of mature ANF, ProANF, a fragment or ProANF.

18. The method of claim 17 wherein the ProANF is selected from the group
5 consisting of ANF₁₋₉₈, and ANF₁₋₁₂₆.

19. The method of claim 18 wherein the mature ANF comprises ANF₉₉₋₁₂₆.

20. The method of claim 2 wherein the assay is selected from the group consisting
10 of RIA, ELISA, fluoroimmunoassay, immunofluorometric assay, and immunoradiometric assay.

21. The method of claim 1 wherein the patient is a human or a non-human animal.

15 22. A method of monitoring the effectiveness of a therapy for treating cardiomyopathy, myocarditis, or an infection capable of causing cardiomyopathy or myocarditis in a patient, the method comprising;

i) obtaining two or more than two samples of a body fluid from the patient over a period of time;

20 ii) determining the level of a brain natriuretic peptide (BNP) or a fragment thereof, atrial natriuretic peptide (ANF), or a fragment thereof, or both BNP or a fragment thereof and ANF or a fragment thereof, within the two or more than two samples of body fluid;

25 wherein, a decrease in BNP, ANF or both BNP and ANF in the sample over the period time is an indicator of success of the treatment.

23. A method of assisting in the diagnosis of cardiomyopathy, myocarditis, or both, that arises as a result of an infection in a patient, comprising:

- i) obtaining a sample of a body fluid from the patient, and
- ii) determining a level of BNP₇₇₋₁₀₈, or ANF₉₉₋₁₂₆, or both BNP₇₇₋₁₀₈ and ANF₉₉₋₁₂₆,
5 within the sample; and
- iii) comparing the level of BNP₇₇₋₁₀₈, ANF₉₉₋₁₂₆, or both BNP₇₇₋₁₀₈ and ANF₉₉₋₁₂₆ to the
corresponding level of BNP₇₇₋₁₀₈, ANF₉₉₋₁₂₆, or both BNP₇₇₋₁₀₈ and ANF₉₉₋₁₂₆
determined from a separate sample obtained from a control group,

where an increase in the level of BNP₇₇₋₁₀₈, ANF₉₉₋₁₂₆, or both BNP₇₇₋₁₀₈ and ANF₉₉₋₁₂₆ in
10 the sample, compared to the level of BNP₇₇₋₁₀₈, ANF₉₉₋₁₂₆, or both BNP₇₇₋₁₀₈ and ANF₉₉₋₁₂₆ in the control group, is an indicator of a symptom of cardiomyopathy, myocarditis or
both cardiomyopathy and myocarditis, that arise as a result of an infection.